

ARMY RDT&E BUDGET ITEM JUSTIFICATION (R2 Exhibit)						February 2004				
BUDGET ACTIVITY 3 - Advanced technology development				PE NUMBER AND TITLE 0603238A - Global Surveillance/Air Defense/Precision Strike T			PROJECT 177			
COST (In Thousands)				FY 2003 Actual	FY 2004 Estimate	FY 2005 Estimate	FY 2006 Estimate	FY 2007 Estimate	FY 2008 Estimate	FY 2009 Estimate
177	JT ALS PS DEMO			29774	12505	10721	12441	12766	13054	13352
<p><u>A. Mission Description and Budget Item Justification:</u> Joint Precision Strike Demonstration’s (JPSD) mission is to integrate and demonstrate innovative futuristic Operational Concepts and Tactics Techniques and Procedures (TTPs) with emerging technologies to significantly improve OSD/Joint Command, Control, Communications, Computers, Intelligence, Surveillance and Reconnaissance (C4ISR) capabilities. JPSD horizontally integrates state-of-the-art software applications and tools across the spectrum of C4ISR to optimize sensor to shooter operations and solve critical joint problems. The Integration and Evaluation Center (IEC), the foundation for JPSD’s Simulation Based Acquisition process, was used to establish the Joint Virtual Battlespace (JVB) concept. JVB was designed to conduct studies and demonstrations for measuring and evaluating system of systems designs and concepts. JVB advanced software designs and a draft modeling and simulations architecture transition into PE 0603015A, Project S30 (Joint Virtual Battlespace) to support the Modeling Architecture for Technology and Research EXperimentation (MATREX) research. Further work on JVB will be done within the context of MATREX starting in FY04. The results of the ICT advanced technology development effort will transition into PE 0605718, Project S01 (Integration and Evaluation Center (IEC) Sustainment) where it will support MATREX on a reimbursable basis starting in FY04. The Theater Precision Strike Operations (TPSO) Advanced Concept Technology Demonstration (ACTD), by use of state of the art software applications/tools provides the Commander, Combined Forces Command (CFC), Korea with a significantly enhanced Theater-wide capability to plan, coordinate and conduct Counter-Fire, Precision Strike Engagements and Joint Battlespace Command and Control (C2). TPSO has also provided software applications for the worldwide Combatant Commanders and their component commanders to perform Near-Real-Time C2. These enhancements have been provided to CENTCOM, PACOM, SOCOM, EUCOM and JFCOM. The Joint Intelligence, Surveillance and Reconnaissance (JISR) ACTD implements a tactical networked sensor grid using internet web based technologies to horizontally integrate tactical and operational level ISR information from existing stove-piped legacy Service and joint C4ISR systems for CENTCOM (ARCENT and 1st Marine Expeditionary Force (MEF)). JISR also integrates nontraditional tactical sensors (i.e., FIREFINDER radar and unattended ground sensors) into an Intelligence, Sensor and Reconnaissance (ISR) picture which allows the Early Entry Force (EEF) Commander and his higher headquarters to access and geospatially visualize all available ISR information using any workstation equipped with a web browser. This capability will be integrated worldwide. The cited work is consistent with Strategic Planning Guidance, the Army Science and Technology Master Plan (ASTMP), the Army Modernization Plan, and the Defense Technology Area Plan (DTAP). The JPSD is a member of the Program Executive Office, Intelligence, Electronic Warfare, and Sensors (PEOIEW&S), Fort Monmouth, NJ. Work is done at JPSD, Ft. Belvoir, VA.</p>										

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<u>Accomplishments/Planned Program</u>		FY 2003	FY 2004	FY 2005
TPSO ACTD - FY03: Participated and supported major Combined Forces Command (CFC) exercises and component exercises to add ADOCS upgrades and new capabilities. Provided support training, upgrades and field support to major field exercises (RSO&I; UFL03, Lucky Sentinel, MC03, MEFEX, BFE-J, JEFX). Participated in and supported both Operation Southern Watch in Afghanistan and Operation Iraqi Freedom (OIF). Provided ADOCS applications to support deliberate targeting (ATO/ACO), time sensitive targeting, situational awareness, and other mission threads to over 3000 joint warfighter users at HQ CENTCOM Forward and its components. Upgraded ADOCS worldwide with new capabilities based on critical CFC requirements (CENTCOM, EUCOM, SOCOM, PACOM and JFCOM). Executed transition and sustainment plans to support the TPSO "Leave Behind" systems during the final year of transition. Matured DII - COE Level Six compliant version of ADOCS.		9519	0	0
JISR ACTD - FY03: Refined and Enhanced JISR interfaces to source systems based upon user defined TTP/CONOPS (Lucky Sentinel 03, MEFEX 03, OIF. Planned and executed additional formal assessment by Joint Interoperability Test Center (JITC), Joint Command, Control, Communication, Computers, Intelligence, Surveillance and Reconnaissance (C4ISR) Battle Center and warfighter assessments by CENTCOM and I MEF. Completed an assessment of military utility, operational effectiveness, suitability, and interoperability during demonstration. FY04: Refine and enhance interoperability reviews of Defense Information Infrastructure/ Common Operating Environment (DII/COE) certification from appropriate certification authorities to include DISA. Transition Memoranda of Agreement will be accomplished with proposed programs executive officer's (PEO's) with responsibilities for programs of record, ASAS-L, CHIMS, GCCS/JC2, and DCGS-A. FY05: Complete sustainment support to respective service and joint C4ISR user warfighters of the JISR product delivered in FY04. Field up to seven additional JISR servers to support technology transition to programs of record; ASAS-L, CHIMS, C2PC, GCCS, DCGS-A, MCS-L and JC2. Deploy an additional four servers in support of OIF II in Iraq and Kuwait, expanding our user base to the coalition partners and the CPA. Continued presence of contractor personnel in Iraq to provide training, and system support to organizations using JISR servers. Continue to maintain and upgrade the current set of JISR servers (seven) in support of operations and transition. Complete the ACTD.		4808	12153	8749

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BUDGET ACTIVITY

3 - Advanced technology development

PE NUMBER AND TITLE

**0603238A - Global Surveillance/Air
Defense/Precision Strike T**

PROJECT

177

Accomplishments/Planned Program A(continued)

JVB - FY03: Supported FCS C4ISR Experiment at Ft. Knox in Dec 2003 and FCS LSI Capstone Demonstration in March 2003 (key events for FCS Milestone B Decision in FY 2003). Developed software to integrate contractor virtual prototypes and conducted operational analysis of contractor final concepts in support of FCS program decision. Integrated dynamic environment, NBC component simulations and CONOPS/tactics into the JVB framework. Integrated models, services and simulation elements from the Army's Research, Development and Engineering Center community. Transitioned effort lead to AMC RDE Command. In FY04 and beyond, this effort is funded in PE 0603015A, Projects S30 (Joint Virtual Battlespace) and S31 (RDEC Federation).

FY 2003

15447

FY 2004

0

FY 2005

0

IFSAR MAPPING - FY03: IFSAR MAPPING ACTD approved. Implementation Directive and Management Plan developed. FY04: sensor system design and component fabrication. Platform weight, balance and aerodynamics analysis. FY05: Component laboratory test, integration and evaluation.

0

0

1972

Small Business Innovative Research/Small Business Technology Transfer Programs

0

352

0

Totals

29774

12505

10721

B. Program Change Summary

FY 2003

FY 2004

FY 2005

Previous President's Budget (FY 2004)

29788

12660

8833

Current Budget (FY 2005 PB)

29774

12505

10721

Total Adjustments

-14

-155

1888

Congressional program reductions

-108

Congressional rescissions

Congressional increases

Reprogrammings

-14

-47

SBIR/STTR Transfer

Adjustments to Budget Years

1888

Significant Change Explanation:

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<p>FY05 - Funds increased to support the Tactical IFSAR ACTD.</p>		